

AMENDMENTS TO THE CLAIMS

What is claimed is:

1. (Currently Amended) A system for designing a custom board, comprising:
- a plurality of form factors;
 - a plurality of functional modules;
 - a cost quotation module for determining a cost quotation for a selected form factor in relation to selected ones of said plurality of functional modules;
 - a design feasibility module for determining a design feasibility for said selected form factor in relation to selected ones of said plurality of functional modules wherein each selection related to each of said plurality of functional modules is limited according to compatibility with previously selected functional modules; and
 - a computer adapted to display said cost quotation and said design feasibility for said selected form factor in relation to selected ones of said plurality of functional modules.
2. (Original) The system of claim 1 wherein said plurality of functional modules is selected from the group consisting of processors, chip sets, memory configurations, graphics controllers, peripheral controllers, and I/O controllers.
3. (Original) The system of claim 1 further comprising a plurality of attributes for each of said plurality of functional modules.
4. (Original) The system of claim 3 wherein said plurality of attributes comprise cost parameters, a lead time parameter, a minimum buy quantity parameter, power parameters, size parameters, area parameters, placement parameters,

mechanical parameters, and electrical parameters.

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5. (Original) The system of claim 1 wherein said form factor is selected from the group consisting of AT, LPX, ATX, NLX, cPCI, PICMG, and custom SBC.
 6. (Original) The system of claim 1 further comprising a plurality of attributes for each of said plurality of form factors.
 7. (Original) The system of claim 6 wherein said plurality of attributes for each of said plurality of form factors comprises size parameters, area parameters, a form factor type parameter, and a maximum number of slots parameter.
 8. (Original) The system of claim 1 wherein said computer is adapted to display an inquiry window, a product features window, and a design feasibility window.
 9. (Original) The system of claim 8 wherein said inquiry window comprises interactive controls for selecting one of said plurality of form factors.
 10. (Original) The system of claim 8 wherein said products features window displays features for selected ones of said plurality of functional modules.
 11. (Original) The system of claim 8 wherein said design feasibility window displays a current feasibility analysis for said selected form factor and selected ones of said plurality of functional modules.
 12. (Original) The system of claim 1 wherein said cost quotation module and said design feasibility module are operational at a web server accessible via the Internet.
 13. (Original) The system of claim 12 wherein said computer is adapted to connect to said web server via the Internet.
 14. (Currently Amended) A method for designing a custom board comprising the

steps of:

defining a plurality of form factors;

defining a plurality of functional modules;

prompting a user to select one of said plurality of form factors;

determining which of said plurality of functional modules are compatible with said selected form factor;

prompting a user to select at least one of said plurality of functional modules determined to be compatible with said selected form factor;

providing a design feasibility assessment for said selected form factor and said selected functional module; and

providing a cost quotation for said selected form factor and said selected functional module.

15. (Original) The method of claim 14 wherein the step of said prompting a user to select one of said plurality of form factors comprises the step of prompting said user to select a form factor from the group consisting of AT, LPX, ATX, NLX, cPCI, PICMG, and custom SBC.
16. (Original) The method of claim 14 wherein the step of defining a plurality of form factors comprises the step of associating a plurality of attributes with each of said plurality of form factors.
17. (Original) The method of claim 16 wherein the step of associating a plurality of attributes with each of said plurality of form factors comprises the step of associating size parameters, area parameters, a form factor type parameter, and a maximum number of slots parameter with each of said plurality of form factors.

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18. (Original) The method of claim 14 wherein the step of defining a plurality of functional modules comprises the step of associating a plurality of attributes with each of said plurality of functional modules.
 19. (Original) The method of claim 18 wherein the step of associating a plurality of attributes with each of said plurality of functional modules comprises the step of associating cost parameters, a lead time parameter, a minimum buy quantity parameter, power parameters, size parameters, area parameters, placement parameters, mechanical parameters, and electrical parameters with each of said plurality of functional modules.
 20. (Original) The method of claim 14 further comprising the step of prompting said user to select a second functional module.
 21. (Original) The method of claim 20 further comprising the step of updating said cost quotation and design feasibility assessment based on said second functional module.
 22. (Currently Amended) A method for evaluating custom board designs comprising the steps of:
 - prompting a user to select a plurality of functional modules;
 - prompting said user to specify options for said selected functional modules wherein said options for said selected functional modules are limited to options compatible with said user's prior selections;
 - displaying in a products features window feature information for said selected functional modules and specified options;
 - displaying in a design feasibility window a design feasibility assessment for

said selected functional modules and specified options;

determining if said user has changed said functional modules and specified options; and

updating said feature information in said products feature window and said design feasibility assessment in said design feasibility window in accordance with changes to said functional modules and specified options.

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23. (Original) The method of claim 22 further comprising the step of associating a plurality of attributes with each of said plurality of functional modules.
 24. (Original) The method of claim 23 wherein the step of associating a plurality of attributes with each of said plurality of functional modules comprises the step of associating cost parameters, a lead time parameter, a minimum buy quantity parameter, power parameters, size parameters, area parameters, placement parameters, mechanical parameters, and electrical parameters with each of said plurality of functional modules.
 25. (Original) The method of claim 22 further comprising the step of prompting said user to select one of a plurality of form factors.
 26. (Original) The method of claim 25 wherein the step of said prompting a user to select one of a plurality of form factors comprises the step of prompting said user to select a form factor from the group consisting of AT, LPX, ATX, NLX, cPCI, PICMG, and custom SBC.
 27. (Original) The method of claim 25 further comprising the step of associating a plurality of attributes with each of said plurality of form factors.
 28. (Original) The method of claim 27 wherein the step of associating a plurality of

attributes with each of said plurality of form factors comprises the step of associating size parameters, area parameters, a form factor type parameter, and a maximum number of slots parameter with each of said plurality of form factors.

29. (Original) The method of claim 25 further comprising the step of updating said feature information in said products feature window and said design feasibility assessment in said design feasibility window in accordance with said selected form factor.
30. (Original) The method of claim 27 further comprising the step of displaying in said design feasibility window a cost quotation for said selected functional modules and specified options.
31. (Original) The method of claim 29 wherein the step of displaying in said design feasibility window a cost quotation comprises the steps of:
- displaying a material cost for said selected functional modules and specified options;
 - displaying a labor cost for said selected functional modules and specified options; and
 - displaying an overhead and profit cost for said selected functional modules and specified options.
32. (Original) The method of claim 22 further comprising the step of displaying a production lead time in said design feasibility window.